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The final months of ONR-URI support to the UW-MBP have been used to excellent advantage to ensure the postgraduate careers of our first MBP graduates and to establish a new joint research program merging interests in the bioremediation and fisheries sciences. They have also provided leverage for new sources of external support for our continuing research and training program. Perhaps most importantly, our group of dedicated MBP faculty, students and staff continue to meet regularly, across disciplines and colleges, to benefit from our past experiences, to entrain new graduate and undergraduate students into the overall effort, and in general to build for the future of this emerging field at the University of Washington and elsewhere.

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In March of 1997, the UW Marine Bioremediation Program (MBP) was reviewed for the last time by the external board of visitors designated for this task. Their positive and supportive assessment of the program provided continued incentives during the final months funded by the original ONR URI award and beyond. A six-month no-cost extension of the award, from April to October, 1997, enabled continued support for MBP graduate students. In particular, Karl Rockne (advised by Stuart Strand and Dave Stensel in Civil Engineering) was able to complete and defend his PhD Thesis on "Biodegradation of multi-ring homocyclic and heterocyclic aromatic compounds under anaerobic conditions in marine environments." Rockne is now pursuing postdoctoral research in the laboratory of Lily Young at Rutgers University. Allison Geiselbrecht (advised by Staley in Microbiology) will soon be defending her thesis on "The distribution and degradative potential of aerobic polycyclic aromatic hydrocarbon-degrading bacteria in marine sediments." She begins an NRC postdoctoral fellowship in September 1998 at the NOAA National Marine Fisheries Science Center in Seattle, WA. The award of this fellowship marks the beginning of national recognition of a new joint program between the UW and NMFS in marine bioremediation. This joint program is also being facilitated in significant ways by the WA State Sea Grant program, which has awarded new funding to many of our MBP faculty to continue our collective efforts in marine bioremediation. One of these new Sea Grant awards will support Yves-Alain Vetter as a postdoctoral fellow in Chemical Engineering at UW (with Barbara Krieger-Brockett) to interface with Geiselbrecht and the NMFS scientists involved in the new joint program. Vetter completes his doctoral thesis (advised by Deming in Oceanography), partially funded by the original ONR-URI grant, on "Bacterial foraging in marine aggregates and sediments by means of freely released extracellular enzymes" in June 1998. A complete listing of graduate student theses completed and anticipated as a result of ONR-URI funding is attached.

An updated version of the MBP's publication record, including some manuscripts near submission, is also attached, along with the substantial list of abstracts and invited or contributed presentations that have constituted a major part of our outreach effort. These records indicate the vitality of our individual and interactive research programs in marine bioremediation. That the majority of the papers are jointly authored by MBP faculty and students from various departments reflects clearly the degree of inter-disciplinary collaboration that we have succeeded in establishing on campus. As a result of the successes and continuing promise of our research, training and outreach activities under the auspices of the ONR-URI award, the University of Washington Provost Office has provided interim support for the program, as we make the transition from block ONR support to other sources and types of funding for research in marine bioremediation. In particular, we are focusing on industrial and private support of our research and training goals. Several contracts from the private sector are already in place as a result of this interim University support.

In summary, the final months of ONR-URI support to the UW-MBP have been used to excellent advantage to ensure the postgraduate careers of our first MBP graduates and to establish a new joint research program merging interests in the bioremediation and fisheries sciences. They have also provided leverage for new sources of external support for our continuing research and training program. Perhaps most importantly, our group of dedicated MBP faculty, students and staff continue to meet regularly, across disciplines and colleges, to benefit from our past experiences, to entrain new graduate and undergraduate students into the overall effort, and in general to build for the future of this emerging field at UW and elsewhere.

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Anders, Krista M. Anticipated 1998. Transformations of chlorophenolics in the marine environment: Fate modeling and the characterization of methanogenic and sulfidogenic chitin-degrading enrichments. PhD Thesis, Civil Engineering (with **Ferguson**).

Bieniek, Michelle. 1995. Isolation of PAH-tolerant protists and their effects on PAH degradation by *Cycloclasticus* sp. Masters Thesis, Oceanography (with **Deming** and **Lessard**).

Fox, David. 1995. Model effects of tidal and groundwater seepage on contaminant transport from a capped PAH-contaminated marine sediment in Eagle Harbor, Puget Sound. Masters Thesis, Civil Engineering (with Massman [and **Ferguson**]).

Geiselbrecht, Allison D. Anticipated 1998. The distribution and degradative potential of aerobic polycyclic aromatic hydrocarbon-degrading bacteria in marine sediments. PhD Thesis, Microbiology (with **Staley**).

Hedlund, Brian. Anticipated 1999. Polycyclic aromatic hydrocarbon catabolic diversity in marine sediments. PhD Thesis, Microbiology (with **Staley**).

Lee, Jean H. 1993. Anaerobic biotransformations of chlorophenolic compounds by marine sediment enrichments. Masters Thesis, Civil Engineering (with **Ferguson**).

Lee, Seunbong. Anticipated 1998. Masters Thesis, Civil Engineering (with **Stensel**).

Liu, Yu-Ting. 1994. Enhancement of polyaromatic hydrocarbon degradation in the marine environment. Masters Thesis, Civil Engineering (with **Stensel**).

Mannisto, Minna. 1995. Biodegradation of polychlorinated biphenyls and polycyclic aromatic hydrocarbons by marine sediment microorganisms. Masters Thesis, Helsinki University of Technology (with **Ferguson**).

Ofjord, Gro D. 1993. Reductive dehalogenation of polychlorinated biphenyls and chlorobenzene by marine microorganisms. Masters Thesis, Civil Engineering (with **Ferguson**).

Poeton, Tom. 1996. Biodegradation of polyaromatic hydrocarbons by marine bacteria: Effect of solid phase on kinetics. Masters Thesis, Civil Engineering (with **Stensel**).

Rockne, Karl J. 1997. Biodegradation of multi-ring homocyclic and heterocyclic aromatic compounds under anaerobic conditions in marine environments. PhD Thesis, Civil Engineering (with **Strand** and **Stensel**).

Schmidt, Jill L. 1996. Porosity and benthic bacterial abundance. Masters Thesis, Oceanography (with **Deming**).

Tofting, Randi. 1995. Polycyclic aromatic hydrocarbons in the marine sediment. Diploma Thesis for Technical Studies, National Technical University of Norway (with **Krieger-Brockett**).

Vetter, Yves-Alain. 1998. Bacterial foraging in marine aggregates and sediments by means of freely released extracellular enzymes. PhD Thesis, Oceanography (with **Deming**).